

REMARKS

Claims 1-10 are pending in this application. By this Amendment, claims 1 and 6 are amended. No new matter is added.

Applicant gratefully acknowledges the Office Action's indication that claims 3, 8 and 9 contain allowable subject matter.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Williams in the April 26 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

I. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1, 2, 4-7 and 10 under 35 U.S.C. §102(b) over Publication US 2001/0023423 A1 to Marinet. This rejection is respectfully traversed.

Marinet does not disclose "intermittently oscillating a given electronic signal, the intermittent oscillation effecting a rise time from oscillation start to steady oscillation," as recited in claim 1, and as similarly recited in claim 6.

Referring to the specification at paragraphs [0012]-[0015], the DC voltage is supplied to the switching circuit 30 from the power supply 10 and modulated by the rectangular wave from the oscillator 20. The modulated rectangular DC voltage is supplied to the oscillating circuit 40 and oscillated intermittently. As claimed, at the initial oscillation stage, the rise time from the oscillation start to the steady oscillation of the oscillating circuit 40, the frequency and the amplitude of the electronic signal to be oscillated becomes unstable with the random noise of the oscillating circuit 40 and the like. By setting a given threshold value for the electronic signal, therefore, a binary random number of numerals "0" and "1" may be generated based on the magnitude relation between the amplitudes of electronic signals and the threshold value.

Referring to paragraph [0019] of Marinet, the generator 10 supplies a sawtooth waveform signal 30 as in Fig. 2A, of which the amplitude varies between the reference values V^+ and V^- . The signal 30 is sampled by the pulse signal 32 supplied by the generator 12 in the sampling circuit 14 to form samples 34, 36 and 38, of which the amplitudes are respectively less than, greater than, and less than the medium voltage $(V^+ + V^-)/2$. The comparator 18 allots binary digits 0, 1 and 0 for the samples 34, 36 and 38 on the magnitude relation between the amplitudes of the samples and the medium voltage.

In the claimed invention, the power supply 10, through the oscillating circuit 40, functions as a generator. In the claimed invention, only one generator is employed. Instead, in Marinet, two generators to supply the sawtooth waveform signal and the pulse signal are employed.

Furthermore, in the claimed invention, the intended binary random number is generated by utilizing the rise time of the oscillating circuit, the total generator. In contrast, in Marinet, the binary random number is generated by utilizing the steady condition of the generators. For Marinet, because the steady condition of the generators is employed, the intended random number has periodicity, thus is not perfectly random.

For at least these reasons, it is respectfully that claims 1 and 6 are patentable over Marinet. The dependent claims are likewise patentable over Marinet for at least the reasons discussed, as well as for the additional features they recite. Applicant respectfully requests that the rejection under 35 U.S.C. §102(b) be withdrawn.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-10 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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